CLAIMS

The embodiments of the invention in which an exclusive property or right is claimed are defined as follows. Having thus described the invention what is claimed is:

1. A toggle switch apparatus, comprising:

a toggle mechanism associated with a plurality of basic switches maintained within a tubular housing;

an actuator associated with at least one spring which actuates said plurality of basic switches, wherein said actuator and said at least one spring are located within said tubular housing; and

a lead wire termination assembly configured within said tubular housing, wherein said lead wire termination assembly comprises a plurality of lead wires attached to a plurality of pin contacts that exit through a cover of said tubular housing, thereby permitting said toggle switch apparatus to be actuated manually in a maintained position during high gravity conditions.

2. The apparatus of claim 1 wherein said tubular housing comprises a sealed metal tube.

3. The apparatus of claim 1 further comprising a header which is sealed into said tubular housing.

4. The apparatus of claim 3 further comprising a glass-to-metal seal which seals said header into said tubular housing.

5. The apparatus of claim 1 wherein said cover comprises a metal cover.

6. The apparatus of claim 1 wherein said plurality of basic switches comprises at least one basic switch.

7. The apparatus of claim 1 wherein said plurality of basic switches comprises at least six basic switches.

8. The apparatus of claim 1 wherein said at least six basic switches are aligned within said tubular housing in a row.

9. A toggle switch method, comprising the steps of:

associating a toggle mechanism with a plurality of basic switches maintained within a tubular housing;

associating an actuator with at least one spring for actuating said plurality of basic switches, wherein said actuator and said at least one spring are located within said tubular housing; and

providing a lead wire termination assembly within said tubular housing, wherein said lead wire termination assembly comprises a plurality of lead wires attached to a plurality of pin contacts that exit through a cover of said tubular housing, thereby permitting said toggle switch apparatus to be actuated manually in a maintained position during high gravity conditions.

10. The method of claim 9 further comprising the step of configuring said tubular housing to comprise a sealed metal tube.

11. The method of claim 9 further comprising the step of sealing a header into said tubular housing.

12. The method of claim 11 further comprising the step sealing said header into said tubular housing utilizing a glass-to-metal seal.

13. The method of claim 9 wherein said cover comprises a metal cover.

14. The method of claim 9 wherein said plurality of basic switches comprises at least one basic switch.

15. The method of claim 9 wherein said plurality of basic switches comprises at least six basic switches

16. The method of claim 15 further comprising the step of aligning said at least six basic switches in a row within said tubular housing.

17. A toggle switch system, comprising:

an electronic system under a control of a toggle mechanism associated with a plurality of basic switches maintained within a tubular housing;

an actuator associated with at least one spring which actuates said plurality of basic switches, wherein said actuator and said at least one spring are located within said tubular housing; and

a lead wire termination assembly configured within said tubular housing, wherein said lead wire termination assembly comprises a plurality of lead wires attached to a plurality of pin contacts that exit through a cover of said tubular housing, thereby permitting said toggle switch apparatus to be actuated manually in a maintained position during high gravity conditions.

18. The system of claim 1 wherein said tubular housing comprises a sealed metal tube.

19. The system of claim 1 further comprising a header which is sealed

into said tubular housing and a glass-to-metal seal which seals said header into said tubular housing, and wherein said cover comprises a metal cover.

20. The system of claim 1 wherein said electronic system comprises a high-performance aircraft.